

WHAT IS CLAIMED IS:

1. A document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in the display means;

storage means having stored therein the multimedia information at least including a figure, image information, speech information and the moving picture information;

a word dictionary in which reading data is associated with a displayed character and further the reading data is associated with a multimedia information identifier representing the multimedia information to be displayed;

a multimedia information registration table in which a keyword associated with reading data in the word dictionary is associated with the multimedia information identifier; and

retrieving means for executing forward coincidence retrieval on reading data of said word dictionary, with an undefined character as a retrieving condition, from one new character inputting processing by said inputting means to another, wherein

if the multimedia information identifier is included in data extracted from the word dictionary as a result of retrieval by said retrieving means, the multimedia information as determined based on said multimedia information identifier is extracted

from said storage means for demonstration on said display means as selectable conversion candidate data.

2. The document editing processing apparatus according to claim 1 further comprising:

an exemplary sentence dictionary in which a defined character is associated with reading data of a character most likely to be input next to said defined character and with a display character associated with said reading data and in which reading data is associated with a multimedia information identifier indicating the multimedia information to be displayed;

said retrieving means executing retrieval of a defined registered character of said exemplary sentence dictionary or forward coincidence retrieval of said defined registered character with the registered reading data, using the defined character or the combination of said defined character with an undefined character as a retrieving condition; wherein

if there is included a multimedia information identifier in data extracted from the exemplary sentence dictionary as a result of retrieval by said retrieving means, the multimedia information indicated by said multimedia information identifier is extracted from said storage means for demonstration as selectable conversion candidate data on said display means.

3. The document editing processing apparatus according to claim 1 wherein

said multimedia information registration table includes multimedia information

access data, in association with each multimedia information identifier, for accessing the multimedia information stored in said storage means;

said multimedia information access data including data for specifying storage means having the multimedia information stored therein.

4. The document editing processing apparatus according to claim 1 wherein said storage means having the multimedia information stored therein is storage means accessible over a network.
5. The document editing processing apparatus according to claim 1 wherein said multimedia information registration table is configured for being associated with one or more keywords in association with respective multimedia information identifiers.
6. The document editing processing apparatus according to claim 1 wherein said multimedia information registration table is configured for making various modifications, such as addition, deletion or correction of registered data and wherein the various modifications, such as addition, deletion or correction of registered multimedia information identifiers or keywords in said multimedia information registration table are reflected in corresponding registered data of said word dictionary so that similar modifications are made in said word dictionary.
7. The document editing processing apparatus according to claim 2 wherein said multimedia information registration table is configured for making various modifications, such as addition, deletion or correction of registered data and wherein

the various modifications, such as addition, deletion or correction of registered multimedia information identifiers or keywords in said multimedia information registration table are reflected in corresponding registered data of said exemplary sentence dictionary so that similar modifications are made in said exemplary sentence dictionary.

8. The document editing processing apparatus according to claim 1 wherein

said conversion candidate data are represented in a document forming area of said display means or in the vicinity thereof as a set of plural conversion candidate data not exceeding N which is a pre-set display number, and wherein conversion candidate words or conversion candidate multimedia information selected from the displayed conversion candidate data are displayed as defined data in a document input position in the document forming area.

9. The document editing processing apparatus according to claim 1 wherein

said word dictionary is configured for dynamically changing the registration sequence of registered data, said word dictionary being also configured so that, if data is selected as document component data in document forming processing, the relevant data in said word dictionary is moved to the leading end;

said retrieving means being configured for sequentially retrieving said word dictionary beginning from the leading end thereof.

10. The document editing processing apparatus according to claim 2 wherein

said exemplary sentence dictionary is configured for dynamically changing the

registration sequence of registered data, said word dictionary being also configured so that, if data is selected as document component data in document forming processing, the relevant data in said exemplary sentence dictionary is moved to the leading end;

said retrieving means being configured for sequentially retrieving said exemplary sentence dictionary beginning from the leading end thereof.

11. A document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in said display means;

storage means having stored therein the multimedia information at least including one of a figure, the image information, speech information and the moving picture information (so that said multimedia information can be extracted depending on a filename);

a word dictionary in which reading data is associated with display characters;

dictionary retrieving means for executing forward coincidence retrieval on reading data of said document dictionary, using an undefined character as a retrieving condition, from one new character inputting processing by said inputting means to another;

file retrieving means for executing forward coincidence retrieval on filenames of said storage means, using an undefined character as a retrieving condition, from one

new character inputting processing by said inputting means to another; wherein

data extracted from said document dictionary as a result of retrieval by said dictionary retrieving means and multimedia information extracted from said storage means as a result of retrieval by said file retrieving means are displayed on said displaying means as selectable conversion candidate data.

12. The document editing processing apparatus according to claim 11 wherein

retrieving processing of a document dictionary by said dictionary retrieving means and retrieving processing of a file of said storage means by said file retrieving means are executed in parallel.

13. The document editing processing apparatus according to claim 11 wherein said

document dictionary is constituted by plural different document dictionaries, and wherein there are provided plural dictionary retrieving means for executing retrieval of said plural document dictionaries, the retrieving processing of document dictionaries by said plural dictionary retrieving means being executed in parallel.

14. The document editing processing apparatus according to claim 11 wherein said

storage means having said multimedia information stored therein is storage means accessible over a network.

15. The document editing processing apparatus according to claim 11 wherein said

conversion candidate data are represented by a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming areas of said display means or in the vicinity thereof, said N being a pre-set number of displayed data,

conversion candidate words or the conversion candidate multimedia information as selected from the displayed conversion candidate data being demonstrated as defined data at document input positions in the document forming area.

16. A document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in said display means;

a multimedia dictionary in which reading data is associated with displayed characters and in which the reading data is associated with the multimedia information containing at least one of the reading data, figure, image information, speech information and the moving picture information; and

retrieval means for executing forward coincidence retrieval on the reading data of said multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting at means to another;

at least one of the displayed characters or the multimedia information extracted from said multimedia dictionary as a result of retrieval by said retrieval means being displayed as selectable conversion candidate data in said display means.

17. The document editing processing apparatus according to claim 16 wherein said multimedia dictionary having said multimedia information as recording data is stored in storage means accessible over a network.

18. The document editing processing apparatus according to claim 16 wherein said conversion candidate data are represented by a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming areas of said display means or in the vicinity thereof, said N being a pre-set number of displayed data, conversion candidate words or the conversion candidate multimedia information as selected from the displayed conversion candidate data being demonstrated as defined data at document input positions in the document forming area.

19. A document editing processing apparatus for preparing a document by the inputting of a character string, comprising:

displaying means for displaying characters and images;

inputting means for inputting a character string in a document forming area in said display means;

a multimedia dictionary in which reading data is associated with displayed characters and in which the reading data is associated with the multimedia information containing at least one of the reading data, figure, image information, speech information and moving picture information, or address data having stored therein said multimedia information;

storage means having stored therein the multimedia information containing at least one of the reading data, figure, image information, speech information and moving picture information so that said multimedia information can be extracted depending on addresses; and



retrieval means for executing forward coincidence retrieval on the reading data of said multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting at means to another;

at least one of the displayed characters or the multimedia information extracted from said multimedia dictionary as a result of retrieval by said retrieval means and data extracted from said storage means based on the address data extracted from said multimedia dictionary being displayed as selectable conversion candidate data in said display means.

20. The document editing processing apparatus according to claim 19 wherein said storage means having the multimedia information is accessible over a network.

21. The document editing processing apparatus according to claim 19 wherein said conversion candidate data are represented by a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming area of said display means or in the vicinity thereof, said N being a pre-set number of displayed data, conversion candidate words or the conversion candidate multimedia information as selected from the displayed conversion candidate data being demonstrated as defined data at document input positions in the document forming area.

22. A document editing processing method in a document editing processing apparatus for preparing a document by the inputting of a character string including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, and storage

means having stored therein the multimedia information including at least one of a figure, image information, speech information and the moving picture information, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a retrieving step of executing forward coincidence retrieval on reading data of a word dictionary, based on the retrieving condition as set at said retrieving condition setting step, said word dictionary being such a one in which the reading data is associated with a multimedia information identifier indicating the multimedia information to be displayed;

a multimedia information extracting step of extracting from said storage means the multimedia information determined based on said multimedia information identifier when said multimedia information identifier is included in data extracted from the word dictionary in said retrieval step; and

a display step for displaying the multimedia information extracted at said multimedia information extracting step as selectable conversion candidate data on said display means.

23. The document editing processing method according to claim 22 comprising:

a second retrieving condition setting step of setting a defined character or a combination of a defined character and an undefined character as a retrieving

condition from one input character defining processing or one new character inputting operation from inputting means to another; and

a second retrieval step of executing retrieval on registered defined characters of an exemplary sentence dictionary having defined characters associated with a multimedia information identifier indicating the multimedia information for display most likely to be input next to the defined character, or forward coincidence retrieval of the registered defined characters and registered reading data, based on the retrieving condition as set at said second retrieving condition setting step;

said multimedia information extracting step extracting from said storage means the multimedia information as determined based on said multimedia information identifier if the multimedia information identifier is included in data extracted from said exemplary sentence dictionary in said second retrieval step.

24. The document editing processing method according to claim 22 wherein

said multimedia information registration table has multimedia information access data for accessing the multimedia information stored in said storage means in association with each multimedia information identifier; and wherein

said multimedia information extracting step extracts the corresponding multimedia information from said storage means based on the multimedia information access data associated with said multimedia information identifier.

25. The document editing processing method according to claim 22 wherein

said display step is a step of displaying a set of a plurality of, specifically, not

larger than N conversion candidate data, in a document forming area of said display means or in the vicinity thereof, said N being a pre-set number of displayed data; and wherein

if a conversion candidate word or a conversion candidate multimedia information piece is selected from the conversion candidate data displayed at said display step, the conversion candidate word or multimedia information pieces so selected is displayed as defined data at a document inputting position in said document forming area.

26. The document editing processing method according to claim 22 further comprising:

a word dictionary registration sequence changing step of shifting relevant data in said word dictionary to a leading end if said data is selected as sentence constituent data in document preparation processing.

27. The document editing processing method according to claim 22 further comprising:

a exemplary sentence dictionary registration sequence changing step of shifting relevant data in said exemplary sentence dictionary to a leading end if said data is selected as sentence constituent data in document preparation processing.

28. A document editing processing method in a document editing processing apparatus for preparing a document by the inputting of a character string including displaying means for displaying characters and images, inputting means for inputting

a character string in a document forming area in said display means, a word dictionary having reading data associated with characters to be displayed, and storage means having stored therein the multimedia information including at least one of a figure, image information, speech information and the moving picture information so that said multimedia information can be extracted responsive to a filename, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on reading data of the document dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another;

a file retrieving step of executing forward coincidence retrieval on filenames of said storage means, with the undefined character as the retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the data extracted from said document dictionary as a result of said dictionary retrieving step and the multimedia information extracted from said storage means as a result of said file retrieving step.

29. The document editing processing method according to claim 28 wherein said dictionary retrieving step and the file retrieving step are performed as parallel

processing.

30. The document editing processing method according to claim 28 wherein said document dictionary is made up of a plurality of different document dictionaries; and wherein

said dictionary retrieving step is such a step in which retrieval of a plurality of document dictionaries is executed in parallel by a plurality of dictionary retrieving means.

31. The document editing processing method according to claim 28 wherein

said display step is a step of displaying a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming area of said display means or in the vicinity thereof, said N being a pre-set number of displayed data; and wherein

the method further includes a step of displaying a conversion candidate word or a conversion candidate multimedia information piece as defined data at a document inputting position in said document forming area if the conversion candidate word or multimedia information piece is selected from the conversion candidate data displayed at said display step.

32. A document editing processing method in a document editing processing apparatus including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, and a multimedia dictionary having reading data associated with a displayed

character and having the reading data associated with multimedia information containing at least one of a figure, image information, speech information and the displayed character, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on reading data of the multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the data extracted from said multimedia dictionary as a result of said dictionary retrieving step as selectable conversion candidate data on said display means.

33. The document editing processing method according to claim 32 wherein

said display step is a step of displaying a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming area of said display means or in the vicinity thereof, said N being a pre-set number of displayed data; and wherein

the method further includes a step of displaying a conversion candidate word or a conversion candidate multimedia information piece as defined data at a document inputting position in said document forming area if the conversion candidate word or

multimedia information piece is selected from the conversion candidate data displayed at said display step.

34. A document editing processing method in a document editing processing apparatus including displaying means for displaying characters and images, inputting means for inputting a character string in a document forming area in said display means, a multimedia dictionary having reading data associated with a displayed character and having the reading data associated with multimedia information containing at least one of a figure, image information, speech information and the moving picture information, and storage means having stored therein the multimedia information containing at least one of a figure, image information, speech information and the moving picture information so that said multimedia information can be extracted responsive to an address, said method comprising:

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on reading data of the multimedia dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the display character or the multimedia information extracted from said multimedia dictionary as a result of said dictionary



retrieving step or data extracted from said storage means based on address data extracted from said multimedia dictionary as selectable conversion candidate data on said display means.

35. The document editing processing method according to claim 34 wherein

said display step is a step of displaying a set of a plurality of, specifically, not larger than N conversion candidate data, in a document forming area of said display means or in the vicinity thereof, said N being a pre-set number of displayed data; and wherein

the method further includes a step of displaying a conversion candidate word or a conversion candidate multimedia information piece as defined data at a document inputting position in said document forming area if the conversion candidate word or multimedia information piece is selected from the conversion candidate data displayed at said display step.

36. A program furnishing medium for tangibly furnishing a computer program for executing document editing processing on a computer system, said computer program including

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a retrieving step of executing forward coincidence retrieval on reading data of a word dictionary, based on the retrieving condition as set at said retrieving condition

setting step, said word dictionary being such a one in which the reading data is associated with a multimedia information identifier indicating the multimedia information to be displayed;

a multimedia information extracting step of extracting from said storage means the multimedia information determined based on said multimedia information identifier when said multimedia information identifier is included in data extracted from the word dictionary in said retrieval step; and

a display step for displaying the multimedia information extracted at said multimedia information extracting step as selectable conversion candidate data on said display means.

37. A program furnishing medium for tangibly furnishing a computer program for executing document editing processing on a computer system, said computer program including

a retrieving condition setting step of setting an undefined character as a retrieving condition from one new character inputting processing from inputting means to another;

a dictionary retrieving step of executing forward coincidence retrieval on reading data of the document dictionary, with the undefined character as a retrieving condition, from one new character inputting processing from said inputting means to another;

a file retrieving step of executing forward coincidence retrieval on filenames of

said storage means, with the undefined character as the retrieving condition, from one new character inputting processing from said inputting means to another; and

a displaying step of demonstrating the data extracted from said document dictionary as a result of said dictionary retrieving step and the multimedia information extracted from said storage means as a result of said file retrieving step.